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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,373	10/08/2003	Dewain L. Wasson	8336.13US01	6124
23552	7590	07/23/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			MULLINS, BURTON S	
			ART UNIT	PAPER NUMBER
			2834	

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/682,373

Applicant(s)

WASSON, DEWAIN L.

Examiner

Burton S. Mullins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12,14-16 and 18-21 is/are rejected.
- 7) ☒ Claim(s) 3,13 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 24 November 2004 has been considered by the examiner.

Drawings

2. The informal drawings are of sufficient quality to permit examination; however, applicant is reminded to supply new formal drawings, should the case be allowed.

Claim Rejections - 35 USC § 112

3. Claims 18-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 18, recitation "the shoulder of the sleeve" lacks antecedent basis. In claim 21, the recitation "the tab extends radially through the second portion of the member" makes no sense because both the tab and the second portion are part of the same member. Does this simply mean the tab extends radially?

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4-5, 7-10, 16 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hult (US 3,760,209). Hult teaches a motor comprising: a shaft 14 running axially through the motor (Fig.2); a sleeve or shell 20 at least partially surrounding the shaft (Fig.2), the sleeve including a periphery defining an open end (not numbered, see Fig.4); a frontplate 54 covering the open end of the sleeve 20 (Figs.2&4); and a member 50 positioned between the sleeve 20 and the frontplate 54 (Figs.2&4), the member 50 being formed of a unitary piece of non-conductive material (the end bell means 46/48, which include members 50/52, comprise plastic; c.2, lines 6-9) including a first portion positioned between the sleeve and the frontplate, a second portion extending axially with respect to the sleeve, and a third portion extending radially (see Figs.2&4); wherein the member 50 reduces a leakage current through a bearing of the motor (inherent, since the member 50 comprises plastic, which prevents any leakage current induced by asymmetric flux distribution in the stator from traveling to the bearings). Regarding independent claim 8, note fasteners 140 extending through holes (not numbered) in the front and backplates 54/56, through the sleeve 20 (Figs.2&4; c.4, lines 13-16). The member 50 is solid and unitary, defines a single opening through which shaft 14 extends, and generally follows the periphery of the open end of the

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sleeve 20 (Fig.4). Regarding independent claim 18, note notches 34/36 defined by the sleeve and stator members 22/24 (Fig.4) which orient the rotational position of the backplate relative to the sleeve 20 since the tabs 100/102 are inserted into spaces 34/36 (c.3, lines 48-51).

Regarding claims 4 and 9, member 52 comprises the second member positioned between sleeve 20 and backplate 56.

Regarding claims 5, 10, 18 and 21 the backplate 56 comprises tabs or fingers 100/102 which are positioned within notches 34/36 defined by the sleeve. This orients the rotational position of the backplate relative to the sleeve 20 as tabs 100/102 are inserted into spaces 34/36 (c.3, lines 48-51). The tabs 100/102 extend radially.

Regarding claim 7, backplate 56 comprises plastic end bell means 48.

Regarding claim 8, note fasteners 140 extending through holes (not numbered) in the front and backplates 54/56, through the sleeve 20 (Figs.2&4; c.4, lines 13-16).

Regarding claim 16, the steps of the claimed method are inherent in the assembly of Hult's machine as described at c.4, lines 13-16.

Regarding claims 20-21, portions of the member 50 extend both axially and radially (Fig.4).

6. Claims 1-2, 6, 12 and 14-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Masaru (JP 01-231633). Masaru teaches a motor comprising: a shaft 2 running axially through the motor (Fig.5); a sleeve or shell 1 at least partially surrounding the shaft, the sleeve including a periphery defining an open end (not numbered, see Fig.5); a frontplate 5 ℓ covering the open end of the sleeve (Fig.5); and a member 6 ℓ positioned between the sleeve and the

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frontplate (Fig.2), the member 6ℓ being formed of a unitary piece of nonconductive material, i.e., insulation (see abstract), including a first portion positioned between the sleeve and the frontplate, a second portion extending axially with respect to the sleeve, and a third portion extending radially (see Figs.2&3); wherein the member 6ℓ reduces a leakage current through a bearing of the motor (inherent, since insulation member prevents leakage currents induced by asymmetric flux distribution in the stator from traveling to the bearings). Regarding claim 4, note second insulation member 6r between sleeve and backplate 5r (Figs.2&3). Regarding claim 6, the sleeve 1 includes a shoulder (not numbered, see Fig.2) with the radially extending portion of the member 6ℓ bearing against the shoulder. Regarding claims 12, 14 and 15, the member includes first, second and third portions which extend radially, axially and radially, respectively. Regarding claim 16, the steps of the claimed method are inherent in the assembly of Masaru's machine.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6, 11-12 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hult in view of Johnson (US 3,555,320). Hult teaches all the elements including a sleeve 20, frontplate 54, and a plastic member 50 positioned between the sleeve and frontplate which

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inherently reduces leakage currents, but does not teach a shoulder on the open end of the sleeve. Johnson teaches a motor housing including cup-shaped frame 12 having a shoulder formed by flanges 44/48 (Figs.1&2) which mate with corresponding flanges on frame 14 at rabbet joints. This provides good alignment between the parts (c.1, lines 26-31). It would have been obvious to provide the sleeve of Hult with a shoulder per Johnson since this would have provided a good alignment fit between the sleeve and end bells.


Allowable Subject Matter

9. Claims 3, 13 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claims 3 and 13, the prior art does not teach that the inner periphery of the third (radially-extending) portion of the member defines at least two notches, each notch accepting a portion of one fastener as each fastener extends through the motor. Hult teaches notches 108/110, but there are no fasteners in the notches. Regarding claim 17, the prior art does not teach or suggest the claimed method including the step of running a fastener used to couple the frontplate to the motor through a notch defined in an inner periphery of a third portion of the member, the third portion being seated in a shoulder of the sleeve.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 571-272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
19 July 2004